

Experience of Land Disputes' Resolution in the Omsk Region

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Abstract— Practice shows that courts annually consider a significant amount of land disputes. This article outlines the most common cases of land disputes, and gives analysis of the causes. Land disputes, as a rule, are long-term in resolving and can drag on for months or even years. In this case, the causes of land disputes may be various factors – prevailing circumstances, individual situations between land owners, and errors of cadastral engineers. When considering land disputes, special skills, experience and professional knowledge are required (in addition to legal knowledge) in the following fields: geodesy, cartography, urban planning, the state real estate cadastre, etc.; which judges often do not have, and that necessitates the examinations and specialists' participation in resolving the disputes, which is a distinctive feature of the considered land disputes.

Keywords—land disputes, registry errors, geodetic measurements, land plot, space imaging, land, remote sensing, land category, land surveying, title documents, real estate objects, adjacent borders, public cadastral map, forensic examination.

I. INTRODUCTION

Land is a unique natural resource and a special subject of disputes, not only for residents of the Omsk region, but also for citizens of all regions of our great country. Land disputes [1] are quite frequent and specific, since the owner's interest in his land plot is quite high and always reverent; therefore the situations for each separate land dispute are not standard and are individual for each case. Ways to solve each property have virtually no templates. There is a known practice of land disputes regarding land use in various countries of the world [2, 3]. When writing this article, we used scientific and educational literature, articles in periodicals of the Russian Federation, regulatory and legislative acts of the Russian Federation in the field of land relations [1] and practical experience in resolving land disputes. The main sources that reveal the theoretical foundations of the causes of land disputes are the work of the author V.I. Romanova [4], which presents typical situations of land disputes. Ways to solve them are disclosed in the work of these authors: V.V. Badera, O.N. Dolmatova, E.A. Kuryachey [5].

II. RESEARCH METHODOLOGY

The research methodology consists of two stages: theoretical and practical stages.

The theoretical stage consists of the following:

- analysis of regulatory literature, instructions, orders for land surveying;

- study of scientific articles and publications on this issue.

The practical stage includes the following:

- study and analysis of land disputes in the Omsk region over a long period of time;

- identification of main causes of land disputes;

- grouping and classification of disputes in relation to land and origin causes.

This article explores cases of incorrect establishment of adjacent borders, as well as inaccurate definition of land category.

III. RESULTS

As a result of a study of various land disputes in the Omsk region and an analysis of the causes of their causes, the authors of the article for the long-term period revealed the following patterns: the bulk of disputes (up to 80%) arise due to incorrect establishment of land boundaries and 20% – incorrect definition of land on which the object is located in relation to which land disputes arose [5, 6].

As evidence, we give examples of disputes related to determining the location of the boundaries of land plots, with the incorrect determination of the category of land in the regions of the Omsk region. To prove the results of the analysis, we will consider using concrete examples the data taken from our more than ten-year practice of resolving land disputes due to the adjacent borders of two land plots.

We give examples when the cadastral engineer made a mistake in establishing the adjacent border.

In the city of Tara, the cadastral engineer unscrupulously analyzed the title documents, did not sufficiently study the situation on the ground, as a result of which he drew an adjacent border along the temporary fence, not taking into account the remains of the old fence. The image clearly shows that on the left there is a temporary fence, although the border should go along the old fence, which is to the right (Fig. 1).

This wrong decision reduced the area of one of the land plots and correspondingly increased the area of a neighboring, adjacent plot. As a result of this decision, the question arose about the areas of neighboring plots and as a result, caused a land dispute and the need for a forensic examination. By field

geodetic works, an analysis of the situation on the ground and the study of title documents, justice was restored. The examination was attended by all interested parties, including the cadastral engineer, who established the wrong border. The title documents for these land plots indicated the linear dimensions of the plots. By joint field measurements, they convinced the cadastral engineer of his mistake, so the land dispute was resolved.

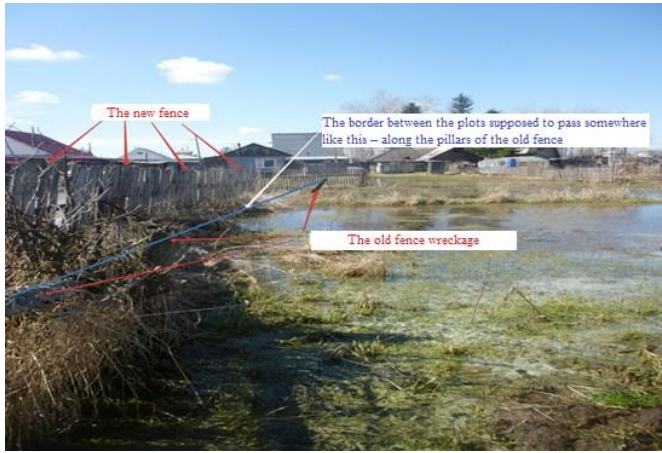


Fig. 1. Border between two land plots owned by individuals.

In the river Sherbakul, in the Omsk region, an examination regarding the allocation of a land plot for the construction of two houses was conducted. When this site was demarcated into two separate cadastral engineers, at the request of one of the owners, drew an adjacent border along the wall of the other owner's house: this infringed his rights, and all permissions and surveying instructions were violated [7].



Fig. 2. Space images of land boundaries.

This violation is clearly shown in Figure 2 – the boundary of the land passes along the wall of the neighboring house. In this example, you can see a violation that is not permissible, and is a gross error of the cadastral engineer, even according to existing standards, and is a vivid example of an incorrect land survey. This error is easy enough to prove even remotely. This error is clearly visible in the space image. As a result of the study, a conclusion was drawn up, where a reference was made to town-planning norms that this border should be no closer than 3.5 meters from a residential building. By court decision, the registry error was corrected. In solving this issue, the method of remote sensing was used [8].

Let us give examples of resolving land disputes when land categories are incorrectly determined for various reasons. Hence, in the village of Volnoe, Poltava district, Omsk region, the territory of the current land plot was defined and classified as agricultural land. The land plot was leased at a knowingly

low price to a legal entity, although in reality in this current area there were grain storage warehouses owned by local farmers, on the initiative of which this land dispute arose. Since the new owner declared that the warehouses are located on his agricultural lands and began to dispose of the property located in these warehouses for his own benefit, that is, to export grain belonging to local farmers for sale. The documents issued to the new owner do not indicate that on the land drawn up under the lease there are warehouses of other owners, but it is indicated that this is agricultural land without capital structures.



Fig. 3. Location scheme of the current land plot and granaries on a space image, assigned to agricultural land.

In the space image, the structures of the warehouses located on the territory of the leased area are clearly visible. This dispute could also be resolved by remote sensing based on the analysis and interpretation of the space image [9] without resorting to a court. The essence of the dispute is that the new tenant claimed that there were no warehouses on his lands, but only a clean field. The question was clearly resolved after the coordinates of the boundaries of the leased land plot were plotted on the space image (Fig. 3). Thus, it became clear that the warehouses are located within the boundaries of the leased area. Therefore, according to the images, it can be assumed that they belong to one or another category of land, and according to the title documents – it is possible to accurately establish a specific category.

A similar case occurred in the village of Kharlamovo, Tauride District, Omsk Region. When surveying, the territory of the brick factory was classified as agricultural land and included in the composition of federal land, that is, the category of land was incorrectly established, which led to a land dispute. In the process of surveying agricultural lands, if buildings are located on them, it is necessary to find out to whom they belong, that is, whether they are recorded in the state cadastral register (ownership).

As a result of surveying, the buildings of the brick factory were not shown, then its territory is assigned to federal lands and excluded from cadastral registration, buildings located on federal lands are transferred to federal ownership. In this case, the cadastral engineer carried out a land survey with a desk method or intentionally did not show the structure on the land plan.



Fig. 4. Contour of the boundaries of the brick factory's land in a space image [9]

The shareholders of the brick factory announced the need for land management expertise, which proved that the territory of the plant does not belong to agricultural land, although it is located in an array of agricultural land (Fig. 4). During the examination, the cadastral engineer was recommended to put all the objects on the boundary plan to prove that the land for the brick factory is located on agricultural land and should be excluded from this category of land.

Thus, in the above examples, the errors on the unqualified determination of the category of land were considered, which caused land disputes. Experts used the method of remote sensing [8] of the earth for evidence and, as a result of the analysis of the space image and the public cadastral map, clearly proved the error. In our cases, space imaging clearly shows that on lands that are assigned to agricultural lands industrial buildings and structures are located and, therefore, it can be suggested that the category of land is incorrectly defined. Therefore, in theoretical terms, a land dispute is an unresolved disagreement between the owners of land plots, which are filed with a court or arbitration court regarding the rights to land plots, as well as in connection with disagreements arising from land and property relations.

IV. DISCUSSION

Analyzing the materials of land disputes in the Omsk region for more than 10 years, two main factors [9] their causing can be distinguished. Most disputes (up to 80%) arise due to errors in determining the adjacent boundaries of land plots. These are the mistakes of cadastral engineers or surveyors, which they make because of insufficient competence and low qualifications, as well as because of little practical experience [10]. The possibility of making deliberate and deliberate mistakes is also not excluded, since this category of errors takes place and is made under the influence of subjective factors. Surveyors make mistakes only when defining adjacent boundaries. Errors by cadastral engineers and surveyors can only be detected by field measurements, using various methods used in surveying; errors are made in particular in determining the linear dimensions of land plots and in determining the coordinates of angular, turning points of the boundaries of plots.

Second in the number of land disputes (up to 20%), these are disputes caused by the incorrect determination of the category of land, those sites on which land surveying is carried out. In most cases, this land category mismatch can be identified and established by remote sensing of the land, based on the analysis of space imaging and public cadastral map

data. In most cases, the mismatch of the land category can be found even at the first stage of work by remote sensing, based on the analysis of space images or large-scale orthophotomaps. And to prove this discrepancy is already possible on the basis of the study of title documents.

V. CONCLUSION

Analyzing more than a decade of experience in resolving land disputes by using examples of various districts of the Omsk region when considering issues on land disputes, the following conclusions can be drawn:

1. With the exact establishment of adjacent boundaries of land for identifying errors during surveying, in most cases, the specialist requires field geodetic measurements with special geodetic instruments, and less often this error can be established by analyzing space images.

2. If the land category is incorrectly defined, the remote sensing method can almost always be applied at the first stage, by using space imaging, large-scale aerial photography or orthophotos. By analyzing and deciphering the materials, it is possible to preliminarily determine the land's category, and then refine it according to the relevant title documents.

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